

AMENDMENT TO THE CLAIMS

1. (Currently amended) An apparatus arrangement for update of cache data in a storage system, the apparatus arrangement comprising:
 - a memory-means for ~~holding~~ storing data;
 - a cache means for ~~holding~~ storing data associated with the memory-means;
 - at least one processor means for preparing change data for updating the cache means; the at least one processor comprising circuitry for
 - ~~means for~~ submitting a request for change to the memory-means;,
 - ~~means for~~ receiving a signal from the memory-means representative of completion of the request for change; and
 - ~~means for~~ updating the cache means with the change data in response to the signal indicating successful completion of the request for change.
2. (Currently amended) The apparatus arrangement of claim 1 wherein the data comprises configuration data.
3. (Currently amended) The apparatus arrangement of claim 1 wherein the storage system comprises a disk storage subsystem.
4. (Currently amended) The apparatus arrangement of claim 3 wherein the memory-means is comprised in a disk adapter.
5. (Currently amended) The apparatus arrangement of claim 3 wherein the memory-means is comprised in a disk controller.
6. (Currently amended) The apparatus arrangement of claim 1 further comprising an interconnect interconnect-means coupled between the memory-means and the cache means for communicating the request for change, and the signal representative of completion of the request for change.

7. (Currently amended) The apparatus arrangement of claim 6 4 wherein the interconnect ~~interconnect means~~ is also arranged to communicate transaction data.
8. (Currently amended) The apparatus arrangement of claim 6 wherein the interconnect ~~interconnect means~~ comprises a device driver.
9. (Currently amended) A method for update of cache data in a storage system, the method comprising:
- providing a memory means holding data;
 - providing a cache means holding data associated with the memory ~~means~~;
 - preparing change data for updating the cache ~~means~~;
 - submitting a request for change to the memory ~~means~~;
 - receiving a signal from the memory ~~means~~ representative of completion of the request for change; and
 - updating the cache ~~means~~ with the change data in response to the signal indicating successful completion of the request for change.
10. (Original) The method of claim 9 wherein the data comprises configuration data.
11. (Original) The method of claim 9 wherein the storage system comprises a disk storage subsystem.
12. (Currently amended) The method of claim 9 ~~13~~ wherein the memory ~~means~~ is comprised ~~provided~~ in a disk adapter.
13. (Currently amended) The method of claim 9 ~~12~~ wherein the memory ~~means~~ is comprised ~~provided~~ in a disk controller.
14. (Currently amended) The method of claim 9 further comprising providing an interconnection ~~interconnect means~~ coupled between the memory ~~means~~ and the cache ~~means~~ for communicating the request for change, the signal representative of completion of the request for change.

15. (Currently amended) The method of claim 14 wherein the interconnection ~~interconnect~~ means also communicates transaction data.

16. (Currently amended) The method of claim 14 wherein the interconnection ~~interconnect~~ means comprises a device driver.

17. (Currently amended) A computer program storage device element ~~readable by a machine and~~ comprising executable computer program instructions ~~means for update of a cache in a storage system, the storage system comprising a memory holding data and a cache holding data associated with the memory, the instructions for performing the method of:~~ claim-9

preparing change data for updating the cache;

submitting a request for change to the memory;

receiving a signal from the memory representative of completion of the request for change; and

updating the cache with the change data in response to the signal indicating successful completion of the request for change.

Please add the following new claims:

18. (New) An apparatus for update of cache data in a storage system, the apparatus comprising:

memory means for holding data;

cache means for holding data associated with the memory means;

means for preparing change data for updating the cache means,;

means for submitting a request for change to the memory means,;

means for receiving a signal from the memory means representative of completion of the request for change; and

means for updating the cache means with the change data in response to the signal indicating successful completion of the request for change.

19. (New) In a system comprising a host coupled to a storage subsystem, a method for operating a write-through cache with a two phase commit technique for logical configuration cache update, comprising:

during phase one, and in response to a submission of a configuration change transaction, constructing a request; and

preparing change data for the cache and storing the prepared change data as a change pending for the cache;

sending the request for processing;

upon receipt of the completed request, checking a return code to determine success or failure of the request; and

if the request completed successfully, the change data is applied to the cache for updating the cache with the contents of the storage subsystem, thereby executing phase two of the two-phase commit procedure; else

if the request failed, the change data is deleted without being applied to the cache.

20. (New) In a system comprising a host coupled to a storage subsystem, the host comprising a write-through cache, said host further comprising a programmed data processor for operating the write-through cache with a two phase commit technique for logical configuration cache update, said data processor operating during a first phase, in response to a submission of a configuration change transaction, for constructing a request and for preparing and storing change data for the cache as a change pending for the cache; said data processor sending the request for processing and, responsive to a receipt of a completed request, checking a return code to determine success or failure of the request; said data processor being responsive to a condition where the request completed successfully for applying the change data to the cache for updating the cache with the contents of the storage subsystem, thereby executing phase two of the two-phase commit procedure; else said data processor is responsive to said request failing for deleting the change data without applying the change data to the to the cache.

21. (New) The host of claim 20, where said host is coupled to said storage subsystem through an adapter.